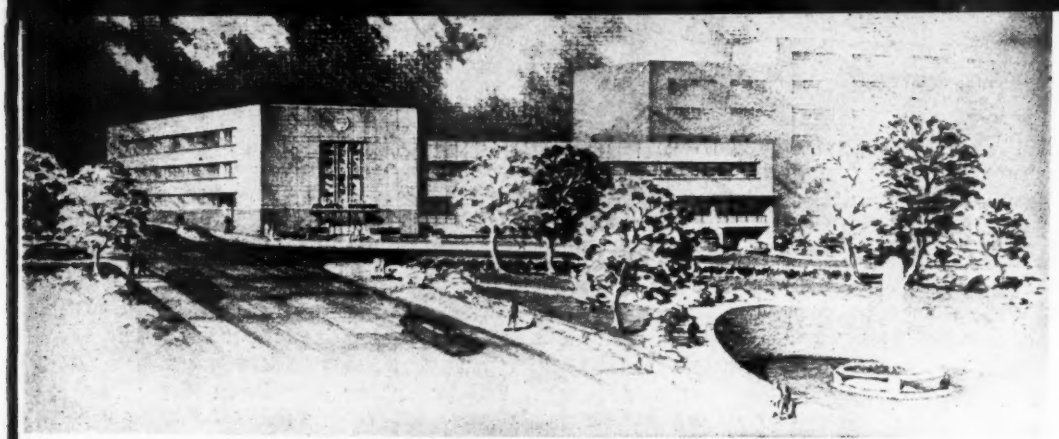

THE ATLANTA ECONOMIC REVIEW

MARCH

VOL. V NO. 3

Published monthly as a service to Atlanta citizens by the Division of Research, School of Business Administration, Atlanta Division, University of Georgia.

Only New Ideas Increase Resources

By

PAUL H. RIGBY *

At Kitimat on the Pacific Coast of Canada over 400 miles north of Vancouver, British Columbia, the Aluminum Company of Canada has been constructing a hydroelectric system with a capacity of approximately 1,230,900 kilowatts.[1] This is about equal to the combined capacity of TVA's Wilson Dam and Bonneville Dam in the Pacific Northwest or the entire capacity of the Georgia Power Company (1,347,430). The power at Kitimat will be produced at a cost of 1 mill per kilowatt as compared with 1.8 mills at Grand Coulee and Bonneville, 3 mills in the Tennessee Valley, and 3.25 mills in some of the developments along the Gulf Coast where natural gas is being used to generate power.

To accomplish this project, the Aluminum Company of Canada dammed a river creating a lake. It then cut a ten mile tunnel through mountains to the Pacific Coast for the water to flow through to a point from which it falls 2,580 feet to the power plant below. The magnitude of this vertical drop might be realized if one considers that the drop at the giant Grand Coulee Dam is only 350 feet or the height of the Empire State Building with its 222 foot television antenna is only 1,694 feet.

This extraordinary development was first visualized about a quarter of a century ago by an obscure bureaucrat, F. W. Knewstubb, in the Department of Lands and Forests of British Columbia's provincial government. Knewstubb prepared a study suggesting how the site at Kitimat could be developed and predicted that it would provide the cheapest power ever produced in North America. In spite of the apparently obvious advantages offered by the site, his proposal was not acted upon until just recently, when the Aluminum Company of Canada began construction.

The underlying circumstances which prevented Knewstubb's proposals from being acted upon sooner than they were lie at the very core of resource development, which is essentially a process of introducing newness and change, a process of innovation. Increasing the resources of a society simply means introducing new ideas to society. In a very real sense resources are products of the imagination. They are creatures of the human mind. Elements of the natural environment are not resources but become resources only as the human mind is able to conceive uses for them.

No part of the natural environment is automatically a resource available to society to satisfy its needs and desires. There are no natural resources other than possibly the air people breathe and the space they stand in. Elements of the natural environment become resources when society has learned how to use them, but until society has learned how to use them, these elements are neutral or raw materials. Preceding the development of neutral or raw materials of the natural environment into resources are ideas about these materials. These ideas suggest and indicate the use to which these materials can be put. If the society accepts the ideas, then the materials become resources, but if it rejects them, the materials remain "neutral stuff." Ideas and their acceptance always precede resource development.

Wood became a heat resource when society learned how to make fire and conceived the idea of using wood as a fuel for the fire. Cotton became a cloth resource when society learned how to use it to weave cloth. Water became a special form of transportation resource with the complex developments in the technology of electricity from the hydroelectric plant to the city trolley. In a similar

1 The information on the Kitimat development is based principally on the following article: Neuberger, R. S., "Power Colossus of the Northwest," Harpers, Vol. 206, No. 1232, January 1953, pp. 56-64.

* *Dr. Rigby is Chairman of the Division of Research and Associate Professor of Economics, at the Atlanta Division of the University of Georgia.*

manner coal, copper, petroleum, sulphur, cattle, and wheat became resources for society only after society developed and adopted new ideas which suggested the use of these various elements. These resources so familiar to some societies became available only as a result of successful innovation in these societies.

It follows, therefore, that that society which wishes to increase the availability of resources to its members and thus increase their income should take those steps which will create conditions conducive to the development and expression of ideas about using the natural environment to satisfy the needs and desires of society. Conversely, any situation which may inhibit the development and expression of ideas will in turn inhibit resource development and the increase of income. If a society is rigid and refuses to accept new ideas, then that society cannot expect to increase its resources. If for religious, political, economic, or social reasons, newness and change are rejected, by the same token resource development is rejected. There can be no resource development without the acceptance of new ideas. Pressure for strict conformity with traditions and customs of the past will not be conducive to the development of resources. In some areas of the world, for example, strict adherance to the custom that cattle are sacred and should not be eaten prevents cattle from becoming a meat resource.

The water which will be flowing through the turbines at Kitimat has become an electric power resource as the result of the development and acceptance by society, since Knewstubb made his proposals, of some new ideas. Before the Kitimat site, or any hydroelectric site for that matter, is of any value for power production, technology must be available through which power can be economically produced and distributed. In addition, people must have the interest, inclination, desire, and ability to organize to take advantage of the technology for developing the site and using the product.

In the case of Kitimat, the development of the site for the production of power was feasible, and there were markets in need of electric power when Knewstubb made his proposals some 25 years ago but the nearest market, Vancouver, was over 400 miles away and the technology was not available to economically transmit electricity much more than 300 miles. For all practical purposes the hydroelectric site at Kitimat was useless until a closer market could be developed or power could be economically transmitted greater distances. The site may have offered fur, fish, or lumber resources, but it did not offer electric power resources.

The development or developments which finally made Kitimat a resource, that is, made economically possible the development of the site, consisted of a number of technological achievements in the light metal industry which brought the market closer to the site at Kitimat and thus overcame the transmission problem. As a result of a number of discoveries, in the light metal industries, a process was developed which made the mass production and consumption of aluminum economically possible. The potential at Kitimat was affected because the process developed for producing aluminum depends on rather large per unit consumption of power. About one fifth of the cost of producing aluminum is paid in electric bills. Ten kilowatts of power are used in producing one pound of aluminum. Because of the large quantity of power needed to produce aluminum, it is economically practical to locate aluminum plants near comparatively isolated power plants as long as the cost of the power is quite low. The low cost of the power is significant enough to overcome the costs of transportation over rather long distances. In the case of Kitimat, the Aluminum Company of Canada determined that the cost of the power that would be available at the site would be low enough so that it would be economical to build a hydroelectric system at Kitimat, locate an aluminum plant nearby, transport alumina from which aluminum is made to Kitimat, and ship aluminum to markets in Canada and the United States. The company's plan is to devote the entire capacity

ATLANTA ECONOMIC REVIEW

Published monthly by the

Division of Research, School of Business Administration
Atlanta Division, University of Georgia
24 Ivy Street, S. E., Atlanta 3, Ga.

School of Business Administration
George E. Manners, Dean

Division of Research
Paul H. Rigby, Ph.D., Director of the Division and Editor of the Atlanta Economic Review
William H. Wells, Statistician
Shirley Thompson, Secretary

Committee on Research
Paul H. Rigby, Chairman
Willys R. Knight
Harold L. Johnson
Marvin Tummins
C. Clyde Jones

Subscription to
ATLANTA ECONOMIC REVIEW

The ATLANTA ECONOMIC REVIEW is sent free of charge to anyone interested in receiving it. If you are not already on the mailing list and wish to receive the REVIEW regularly, please write to the Division of Research, Atlanta Division, University of Georgia, Atlanta, Georgia.

of 1,230,900 kilowatts to the production of aluminum.

In considering the new ideas responsible for the availability of an electric power resource at Kitimat, one must, however, take into account more than just the development and acceptance of new ideas associated directly with electric power and aluminum. One must also consider the general developments which created what we refer to as an industrial civilization. The Kitimat project would never have been conceived without the technological background of the industrial civilization. In addition, one should also consider the industrial civilization's achievements in organizing people to use technology. The inclination and ability of a people to organize is quite as important as the development of technology. Kitimat became a resource not only as a result of technology in the electric and aluminum industries and in the industrial civilization as a whole, but also as a result of the ideas in human organizations as they evolved not only in the Aluminum Company of Canada, the aluminum market of Canada, the aluminum market of the United States, but the entire human organization making up our industrial civilization.

This complex structure, the industrial civilization, is the product of a mass of technological ideas and ideas about human organization and goals which have been collecting since the days when paleolithic man was learning how to make his crude tools from stone and was organizing himself into various kinds of social groups. From the time of the paleolithic man and the early civilizations of Babylonia, Egypt, Greece, and Rome, right up to the discoveries of nuclear physics, man has been gathering ideas about his environment through which he can develop resources from "neutral stuff;" and he has also been gathering ideas about organizing himself to make use of these ideas. This accumulation of ideas through the centuries is responsible for the availability of the power at Kitimat and all the other resources upon which our civilization now depends. Any understanding of resources consequently must be cast in terms of the development and acceptance of new ideas, the process known as the innovation.

The Process of Innovation

Quite simply, the process of innovation in society is the introduction and acceptance of new ideas about the same old world. For all practical purposes the world has not changed since man first inhabited the planet. Since that time, however, man's resources have grown so that the resources available to man today would simply be incomprehensible to early man. This increase in resources has come about with no change in the world but only through the development of ideas about the world and the acceptance of these ideas by society.

The source of ideas leading to innovation are quite varied. They may be within a society or they may be borrowed from another society. Possibly they may result from the combination of ideas in one society with those found in another. The ideas may begin with an individual or with a group. The new ideas may be discovered accidentally or deliberately.

The ideas leading to an innovation are for the most part products of combining old ideas or various aspects of old ideas into a new one. The process is very similar to that of crossing two breeds. The reult is not the same as either of the parents, but it is similar to both parents. Ideas build upon ideas and so innovations are built upon past innovations. Through an awareness of what has been learned, new ideas are conceived through which knowledge is increased. Edison's discoveries in electricity were based upon ideas which had been developed prior to his work.

The process of innovation may be thought of in two parts. One part would be the process of discovery and invention, that is the conceptualization of new ideas. The second part would be the acceptance by society of these new ideas. Both phases are necessary to increase resources. Discoveries and inventions alone do not insure that resources will be increased because society may well refuse to accept them. History is full of examples where people refused to accept discoveries and hence deprived themselves of the benefits that the discoveries might have offered them.

Innovations leading to new resources might be classified in two ways—physical innovations and social innovations. Physical innovations would be those which dealt directly with the nonsocial, but not necessarily nonhuman elements, of the environment. Social innovations would be those which dealt with the organization of people. Examples of physical innovations would be the invention of the vaccination, penicilin, the steam engine, the electric light bulb, radio, television, and air conditoning. Examples of social innovations would be the assembly line, the corporation, representative government, public schools, courts, and community chests. Both types of innovations are necessary to increase resources and in most cases each type requires an accompanying innovation of the other type.

Physical and Social Innovation

Most people, when they think of inventions and discoveries leading to new resources, have in mind physical innovations. They are thinking about Watt's steam engine, Whitney's cotton gin, Newton's laws of motion, Volta's electric battery, Westinghouse's air brake, or Bessemer's converter. The average person attributes the innovations leading to new resources to the field of the natural sciences such as physics, biology, chemistry, etc.

On the other hand, few people associate social

(Continued on Page 6)

JANUARY

ATLANTA AREA ECONOMIC INDICATORS

ITEM	Jan. 1955	Dec. 1954	% Change	Jan. 1954	% Change
EMPLOYMENT					
Job Insurance (Unemployment) Payments	$360,544	$336,183	+7.2	$291,456	+23.7
Job Insurance Claimants†	5,697	5,073	+12.3	5,636	+1.1
Total Non-Agricultural Employment	301,250	309,300*	−2.6	299,000	+0.8
Manufacturing Employment	81,350	81,350*	0.0	79,550	+2.3
Average Weekly Earnings, Factory Workers	$65.45	$65.93	−0.7	$65.69	−0.4
Average Weekly Hours, Factory Workers	40.4	40.7	−0.7	40.8	−1.0
Number Help Wanted Ads	8,090	5,505	+47.0	6,829	+18.5
CONSTRUCTION					
Number Building Permits City of Atlanta	700	624	+12.2	762	−8.1
Value Building Permits City of Atlanta	$11,610,951	$6,822,799	+70.2	$3,417,465	+239.8
Employees in Contract Construction	17,500	18,100*	−3.3	14,700	+ 19.0
FINANCIAL					
Bank Debits (Millions)	$1,330.2	$1,501.6	−11.4	$1,190.3	+11.8
Total Deposits (Millions) (Last Wednesday)	$1,003.1	$1,036.6	−3.2	$954.5	+5.1
POSTAL§					
Postal Receipts	$1,362,782	$1,935,640	−29.6	$1,294,081	+5.3
Poundage 2nd Class Mail	1,317,041	1,246,645	+5.6	1,145,229	+15.0
OTHER					
Department Store Sales Index (Adjusted) (1947—49=100)	143	149	−4.0	121	+18.2
Retail Food Price Index (1947-49=100)	110.2	110.0	+0.2	113.2	−2.7
Number Telephones in Service	256,133	254,686	+0.6	244,332	+4.8
Number Local Calls Per Day	1,847,447	1,855,895	−0.5	1,805,191	+2.3

*Revised
‡City of Atlanta only.

†Claimants include both the unemployed and those with job attachments, but working short hours.

Sources: All data on employment, unemployment, hours, and earnings: Employment Security Agency, Georgia Department of Labor; Number Help Wanted Ads: Atlanta Newspapers, Inc.; Building permits data: Office of the Building Inspector, Atlanta, Georgia; Financial data: Board of Governors, Federal Reserve System; Postal data: Atlanta Post Office; Retail Food Price Index: U. S. Department of Labor; Department Store Sales and Stocks Indexes: Federal Reserve Bank of Atlanta and Board of Governors, Federal Reserve System; Telephones in Service: Southern Bell Telephone and Telegraph Company.

JANUARY, 1954 and 1955

1955	1954	ITEM	Per Cent Change
$11,610,951	$3,417,465	Value Building Permits, City of Atlanta	+239.8
17,500	14,700	No. Construction Employees*	+19.0
8,090	6,829	Number Help Wanted Ads	+18.5
N.A.	N.A.	Department Store Sales,** Based on Dollar Amounts	+18.0
1,317,041	1,145,229	Poundage 2nd Class Mail, Atlanta Post Office	+15.0
$1,330.2	$1,190.3	Bank Debits (Millions)	+11.8
N.A.	N.A.	Department Store Stocks**	+10.0
$1,362,782	$1,294,081	Postal Receipts, Atlanta Post Office	+5.3
$1,003.1	$954.5	Total Deposits (Millions)**	+5.1
256,133	244,332	Telephones in Service**	+4.8
81,350	79,550	No. Manufacturing Employees*	+2.3
5,697	5,636	Job Insurance Claimants	+1.1
301,250	299,000	Total Non-Agricultural Employment*	+0.8
$65.45	$65.69	Average Weekly Earnings, Factory Workers*	−0.4
40.4	40.8	Average Weekly Hours, Factory Workers*	−1.0
110.2	113.2	Retail Food Price Index	−2.7
700	762	Number of Building Permits, City of Atlanta	−8.1

*Average Month
**End of Period
N.A.—Not Available
Sources: Same as page 4

innovation with resource development. Seldom do people see the relationship between new methods of organizing people and resource development. Yet social innovation is every bit as important as physical innovation and, in fact, lack of social innovation can completely inhibit the introduction of physical innovation.

Henry Ford's idea of the assembly line was a social innovation which has made possible not only the production of automobiles but many other products at a cost much lower than they would have been otherwise available.

Just the innovation of specialization in labor, which is a rather old idea, has played a vital role in resource development. It would be difficult indeed to see how modern industrial societies could have developed without the innovation of labor specialization. If every man had to produce every product he consumed, our society would still be primitive indeed.

The American mass market is a social innovation which, to a great extent, is responsible for the level of economic development that has been experienced in the United States. The success of this innovation has prompted many people to comment that one of the stumbling blocks faced by the Europeans in attempting to increase their resources is their inability to accept this innovation of a mass market on the European Continent free from artificial trade barriers such as tariffs and import quotas.

Another significant social innovation is the corporation and in the United States the so-called "giant corporation." The corporation has made possible the type of organization needed for organizing expensive equipment and large numbers of people. The corporation, for example, has played a dominant role in making possible the growth and development of the steel industry, the backbone of the American economy.

These examples illustrate some social innovations which have accompanied physical innovations and which have been as responsible as the physical innovations for increasing resources. The full advantages of physical innovations cannot be secured without accompanying social innovations but here is where the difficulty often develops.

The Problem of Social Innovation

Since people tend to think of physical innovations as being responsible for increasing resources, they tend to ignore the need for social innovations. People tend to accept physical innovation readily because they feel that their resources will be increased thereby, but give little or no thought to social innovations and may even reject them.

This was at one time the problem faced by physical innovation. Incredible as it may seem today, up until a few centuries ago people rejected physical innovations that would have led to increasing resources. They rejected them because they contradicted prevailing beliefs and because they threatened the status quo. During the Middle Ages, society was comparatively rigid and static. There was little or no interest in innovation. People were born into their vocation and social position and they remained there for life. This life offered security but it limited freedom and the introduction of new ideas. Because of this static atmosphere, innovations and, hence, the increase of resources was severely limited. (These are the conditions often prevailing in primitive societies today.)

By the seventeenth century some physical scientists began to crack this rigid atmosphere and introduced new ideas about the natural environment even though they were often met by bitter opposition. Among these ideas were those introduced by Copernicus and Galileo concerning the movement of the earth. One of their ideas was that the earth revolved about the sun instead of the other way around as many people believed. These ideas contradicted the teachings of the church at that time and consequently these men found themselves in a most difficult position. Galileo, for example, was condemned by the Inquisition.

These scientists, plus others such as Francis Bacon and Isaac Newton, were critical of existing ideas about the natural environment and introduced new ideas in spite of apathy or active opposition to them. They persisted and were followed by other scientists who added additional ideas to what society knew about the natural environment. As a result of the efforts of these men, what is known as the "scientific method" was evolved. The development of the "scientific method" has probably been as important an innovation as any during the last 600 years.

As an aftermath of the work of these early physical scientists, the barrier to physical innovation were weakened and our civilization became more receptive to physical innovation. This change in thinking on the part of our civilization plus the new ideas injected by these early scientists, made possible the technological developments which have brought about the modern industrial civilizations. With the turn of the nineteenth century, the new foundations of the physical sciences had been laid and so had the foundations for the growth of a new civilization based on machinery and inanimate energy. What was to be known as the Industrial Revolution was launched and the industrial civilization of the West introduced.

This industrial civilization, however, would never have come into existence had not western people become interested in and willing to accept physical innovation. Yet, as late as the last century, as well as this one, western people were still not always willing to accept physical innovations. An outstanding example was the refusal of many people to accept the discoveries of Charles Darwin in the

field of evolution. In the state of Tennessee during the 1920's, this issue was fought out in the court in the famous Scopes trial with William Jennings Bryan and Clarence Darrow, the opposing lawyers.

In the under-developed areas of the world, such as Asia and Africa, people are just becoming aware of the potential that physical innovations hold for them and the increase in resource availability that they can experience if physical innovations are introduced into their countries. In many respects these countries can be compared with Europe in the Middle Ages. The societies in these areas have been rigid and static and have not been receptive to physical innovation, not to speak of social innovation. Today these areas of the world are experiencing an awakening and are beginning to accept both physical and social innovation.

In most industrial civilizations such as the United States, physical innovations are now accepted rather readily. In fact, the American public almost holds the physical scientist in revered awe. Although they may not have the slightest understanding of many of the processes of the physical scientists, their innovations tend to be readily received and are encouraged as is witnessed by the millions of dollars spent on research for potential physical innovations.

Social innovations, however, have not yet received the same type of acceptance that has been true of physical innovations. This is true principally because of the attitude of society toward social innovation. The attitude of society toward physical innovation has become objective or scientific. While people at one time objected to physical innovations such as Gallileo's because they contradicted prevailing beliefs, people no longer tend to object to new ideas in the physical sciences for these reasons. When a chemist announces a new idea, even though it may contradict every prevailing thought, it is accepted although in some cases in wonder and amazement. This type of objectivity has not yet developed in the attitude of society toward social innovations.

Consequently, physical innovations are accepted more rapidly than social innovations. Social innovations lag behind, producing what is referred to as "social lag" or "cultural lag" and the greater the rate of physical innovation, the greater the lag. Probably one of the most outstanding examples of social lag has been the failure of humanity to develop social innovations to cope with the physical innovations for destroying people in warfare. Failure to develop social innovations to meet the danger of the nuclear weapons could, as many predict, destroy humanity. War is the outstanding illustration of the failure of society to develop and accept adequate innovations to maintain peace. The United Nations is, of course, an attempt in this direction.

James Harvey Robinson in his book, *The Mind in the Making*, made a very interesting comment on this problem.[2] He compared the approach of a mechanic repairing an automobile to that of a senator speaking on proposed legislation. One approaches the problem scientifically and in terms of prevailing knowledge without concerning himself with how automobiles were repaired 40 to 50 years ago. The other, in many situations, instead of focusing attention on existing knowledge, too often tends to call upon the past and to refer to principles which may or may not have been based on scientifically-tested knowledge. Robinson points out the interesting paradox that although a society may tend to discard as obsolete the viewpoint of its ancestors on physical problems, it will adhere to their opinions regarding political and social structure even though no empirical evidence may support them. He asks the question that if the society feels that the knowledge of their ancestors was inadequate for them to correctly understand physical problems, might not it be possible that their knowledge was also inadequate to understand social problems.

A willingness to adopt physical innovation but not social innovation will tend to prevent a society from achieving the benefits to be derived from the physical innovations. To reap the advantages of physical innovations, it is frequently necessary to bring in social innovations to be able to use the physical innovations. The new physical innovations might require greater concentration of control and capital, a higher degree of integration, larger producing units, and hence much larger units of organization.

The copper industry offers a good example. The development of the flotation process made possible the economic processing of copper ores which had as little as 0.7 per cent copper. To use this process, however, great quantities of earth had to be moved and processed requiring a rather considerable concentration of capital to purchase and operate the equipment. Under these circumstances, small scale organization had to be replaced with large organization.

The petroleum and electric industries offer similar examples. The technology developed required a change in organization if the advantages of the new technology were to be secured. The organization of the industries had to be altered to make possible the construction and operation of large expensive plants. In the case of electric power, it was thought necessary to organize public monopolies in order to secure the advantages of technology.

Examples of the attitude of society toward social innovation and illustrating the problem is the criticism of large-scale business enterprise simply because it is large. As pointed out above, some of the advantages of the new physical innovations, such as

2 Robinson, James Harvey, **The Mind In the Making**, Harper and Brothers, New York, New York, 1921, pp. 8 and 9.

the flotation process or electric power production, can be secured only through large-scale organization. Many object to large-scale organization simply on the ground of largeness and that because it is large it may interfere with competition. In answer to the fear that competition may be eliminated by large-scale operations, recently, economic writers such as John K. Galbraith in his book, *Capitalism: The Concept of Countervailing Power,* have suggested that a new form of competition has been developing between large homogeneous groups, which they think is comparable with that which used to prevail between small organizations.

One of the most outstanding examples of lagging social innovations behind physical innovations is found in many agricultural industries. Wheat offers a good example. The production of wheat has been highly mechanized so that the labor needed to produce wheat is only a fraction of what it was a hundred years ago. In spite of these physical innovations the wheat industry is in trouble. Since 1930 many attempts have been made to introduce social innovations such as parity and restricted wheat acreages. The problem continues to be unsolved and quite serious. One might speculate on what the health of the wheat industry might be if all the wheat were produced by the same number of organizations that produce all of the nation's steel. This, of course, should not be interpreted as a recommendation that large-scale organization is the social innovation necessary to cure most of the social lag behind physical innovation in wheat production.

In many ways the attitude toward social innovation today is similar to the attitude toward physical innovation during the days of Bacon, Galileo, Copernicus, and Newton. Society as a whole has failed to adopt an objective and scientific attitude toward social innovation. People who attempt to suggest social innovations are rejected. They receive all sorts and varieties of labels. Unfortunately, this attitude does not help to develop and introduce the social innovations needed to take full advantage of physical innovation.

Corporations and educational institutions might well consider investing as much money for research in social innovation as they do in physical innovation. The public might well consider thinking of the economists, sociologists, anthropologists, and political scientists, not as people tinkering with the social system, but think of them as they do physicists, chemists, or biologists. It is the physical scientists who have introduced the innovations which have placed much of the strain on society such now being experienced by the splitting of the atom. The social scientist is simply trying to help society develop social innovations that will cope with the innovations of physical scientists. Such problems as divorce, juvenile delinquency, management-labor relations, minorities, governmental inefficiency, unemployment, and international tensions might all be better handled if society had the same attitude toward solving them that it has toward physical problems such as building bridges and ships, curing poliomyelitis, and making automobiles.

A change in society's attitude toward physical innovations introduced the Industrial Revolution and the accompanying increase in resources. Could a similar increase in resources be experienced by a change in attitude toward social innovations?

Atlanta Division
UNIVERSITY OF GEORGIA
24 Ivy Street, S.E.
Atlanta 3, Georgia

RETURN POSTAGE GUARANTEED

Sec. 34.65e, P. L. & R.
U. S. POSTAGE
PAID
Atlanta, Georgia
Permit No. 152